CyberView™ dedicated KVM switch and rackmount screen technology

# User Manual 17” FHD 1080p LCD

## DF117

**1U Dual Slide LCD Console Drawer**

**Options :**
- **SDI**
- **HDMI / Audio**
- **DC power**

**751**

Designed and manufactured by Austin Hughes

## Legal Information

First English printing, October 2002

Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. We are not liable for any injury or loss that results from the use of this equipment.

## Safety Instructions

**Please read all of these instructions carefully before you use the device. Save this manual for future reference.**

- Unplug equipment before cleaning. Don't use liquid or spray detergent; use a moist cloth.
- Keep equipment away from excessive humidity and heat. Preferably, keep it in an air-conditioned environment with temperatures not exceeding 40º Celsius (104º Fahrenheit).
- When installing, place the equipment on a sturdy, level surface to prevent it from accidentally falling and causing damage to other equipment or injury to persons nearby.
- When the equipment is in an open position, do not cover, block or in any way obstruct the gap between it and the power supply. Proper air convection is necessary to keep it from overheating.
- Arrange the equipment's power cord in such a way that others won't trip or fall over it.
- If you are using a power cord that didn't ship with the equipment, ensure that it is rated for the voltage and current labeled on the equipment's electrical ratings label. The voltage rating on the cord should be higher than the one listed on the equipment's ratings label.
- Observe all precautions and warnings attached to the equipment.
- If you don't intend on using the equipment for a long time, disconnect it from the power outlet to prevent being damaged by transient over-voltage.
- Keep all liquids away from the equipment to minimize the risk of accidental spillage. Liquid spilled on to the power supply or on other hardware may cause damage, fire or electrical shock.
- Only qualified service personnel should open the chassis. Opening it yourself could damage the equipment and invalidate its warranty.
- If any part of the equipment becomes damaged or stops functioning, have it checked by qualified service personnel.

## What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
  - ☐ Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
  - ☐ Repair or attempted repair by anyone not authorized by us.
  - ☐ Any damage of the product due to shipment.
  - ☐ Removal or installation of the product.
  - ☐ Causes external to the product, such as electric power fluctuation or failure.
  - ☐ Use of supplies or parts not meeting our specifications.
  - ☐ Normal wear and tear.
  - ☐ Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

## Regulatory Notices Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-position or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

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# Contents

## < Part. 4 > KVM Integration

www.austin-hughes.com/support/usermanual/cyberview/UM-CV-MKVM-KIT.pdf

| Matrix DB-15 KVM | Local | Remote | IP | 8-port | 16-port | 32-port |
|---|---|---|---|---|---|---|
| | 1 | 1 | 1 | -MIP813 | -MIP1613 | - |
| | 1 | 1 | 2 | -MIP824 | -MIP1624 | - |
| | 1 | 1 | 0 | -M802 | -M1602 | - |
| | 1 | 2 | 0 | -M803 | -M1603 | - |
| | 1 | 3 | 0 | -M804 | -M1604 | - |

www.austin-hughes.com/support/usermanual/cyberview/UM-CV-SKVM-KIT.pdf

| Combo DB-15 KVM | Local | Remote | IP | 8-port | 16-port | 32-port |
|---|---|---|---|---|---|---|
| | 1 | 0 | 1 | -IP802 | -IP1602 | - |
| | 1 | 1 | 0 | -802 | -1602 | - |
| | 1 | 0 | 0 | -S801 | -S1601 | - |

www.austin-hughes.com/support/usermanual/cyberview/UM-CV-DVIKVM-KIT.pdf

| DVI-D KVM | Local | Remote | IP | 12-port | - | - |
|---|---|---|---|---|---|---|
| | 1 | 0 | 0 | -1201D | - | - |

www.austin-hughes.com/support/usermanual/cyberview/UM-CV-PS2KVM-KIT.pdf

| PS/2 DB-15 KVM | Local | Remote | IP | 8-port | - | - |
|---|---|---|---|---|---|---|
| | 1 | 0 | 0 | -801 | - | - |

## Before Installation

- It is very important to mount the equipment in a suitable cabinet or on a stable surface.
- Make sure the place has a good ventilation, is out of direct sunlight, away from sources of excessive dust, dirt, heat, water, moisture and vibration.

## Unpacking

The equipment comes with the standard parts shown in package content. Check and make sure they are included and in good condition. If anything is missing, or damaged, contact the supplier immediately.

## How To Clean Your LCD Monitor

### Caution :

- To avoid the risk of electric shock, make sure your hands are dry before unplugging your monitor from or plugging your monitor into an electrical outlet.
- When you clean your monitor, do not press down on the LCD screen. Pressing down on the screen can scratch or damage your display. Pressure damage is not covered under warranty.
- Use only cleansers made specifically for cleaning monitors and monitor screens. Cleansers not made to clean monitors and monitor screens can scratch the LCD display or strip off the finish.
- Do not spray any kind of liquid directly onto the screen or case of your monitor. Spraying liquids directly onto the screen or case can cause damage which is not covered under warranty.
- Do not use paper towels or abrasive pads to clean your monitor. Using an abrasive pad or any wood based paper product such as paper towels can scratch your LCD screen.

## Cleaning Your Monitor

To clean your LCD safely, please follow these steps :

① Disconnect the power cord.

② Gently wipe the surface using a clean, dry microfiber cloth. Use as little pressure as possible.

## Cleaning Tough Marks and Smudges

To remove tough marks and smudges, please follow these steps :

① Disconnect the power cord.

② Spray a small amount of non-abrasive cleanser on a microfiber cloth.

**Caution : Do not spray or apply any liquids directly onto the monitor. Always apply the solution to your microfiber cloth first, not directly on the parts you are cleaning.**

③ Gently wipe the surface. Use as little pressure as possible.

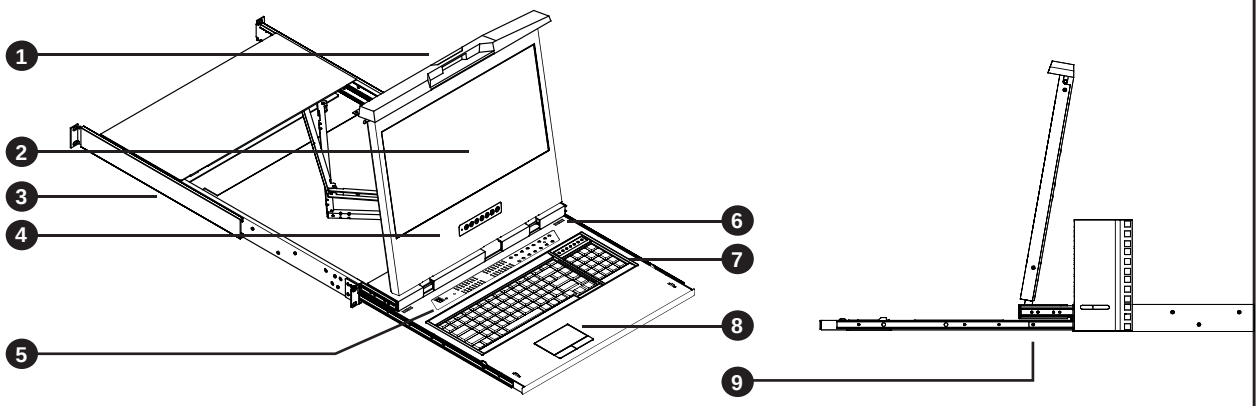
④ Wait until your monitor is completely dry before plugging it in and powering it up.

**DF117 unit X 1**

- CX-6 6ft DVI-D console cable X 1
  ( Alternative : CB-6 6ft VGA console cable )
- Power cord X 1
- M6 screw, cage nut & cup washer X 8

**The above package content is only for the single console models. It varies with options such as KVM, SDI, HDMI, Audio & DC power.**

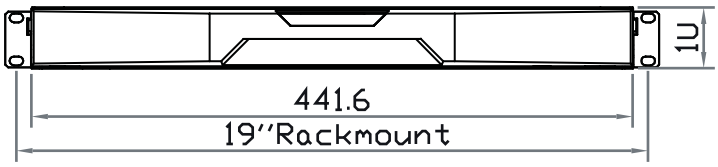
## < 1.2 > Structure Diagram




1. Carry handle to release the 2-pt lock
2. LCD interchangeable module kit
3. Installation Slides
4. LCD membrane
5. Membrane switch (KVM option)
6. Audio speaker ( for SDI, HDMI or Audio option )
7. Keyboard interchangeable module kit
8. Touchpad mouse module
9. 1U dual slide for LCD console drawer

## < 1.2 > Dimension

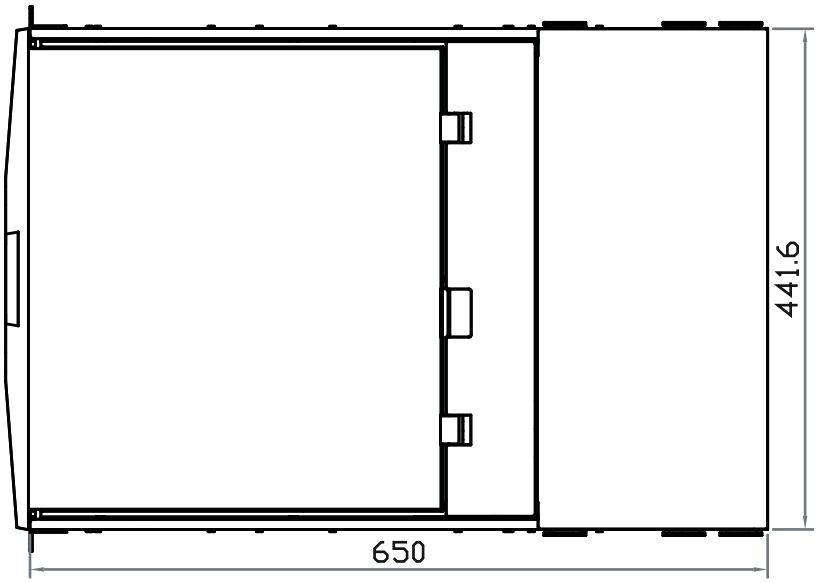
### Front View




### Side View

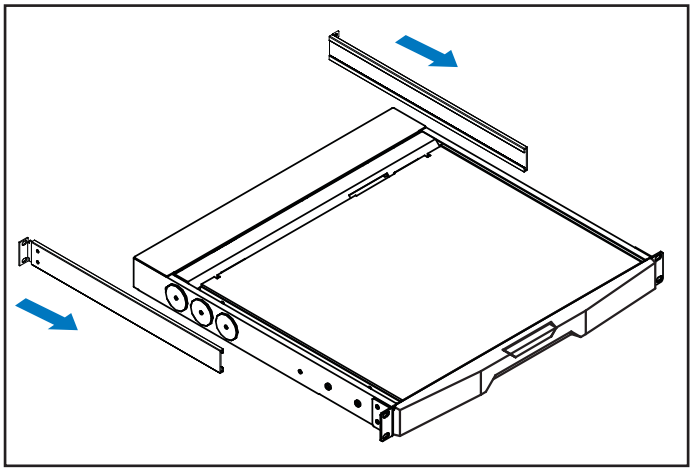
UNIT : mm
1mm = 0.03937 inch

### Top View



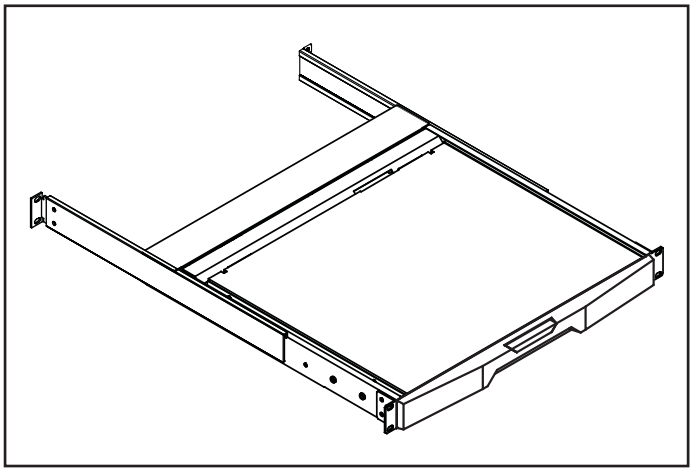

| Model | Product Dimension (W x D x H) | Packing Dimension (W x D x H) | Net Weight | Gross Weight |
|---|---|---|---|---|
| **DF117 series** | 441.6 x 650 x 44 mm<br>17.4 x 25.6 x 1.73" | 595 x 860 x 140 mm<br>23.4 x 33.9 x 5.5” | 11.9 kg<br>26.2 lb | 17.9 kg<br>39.4 lb |

**The weight is only for the single console models. It varies with accessories & options such as KVM, SDI, HDMI, audio & DC power.**



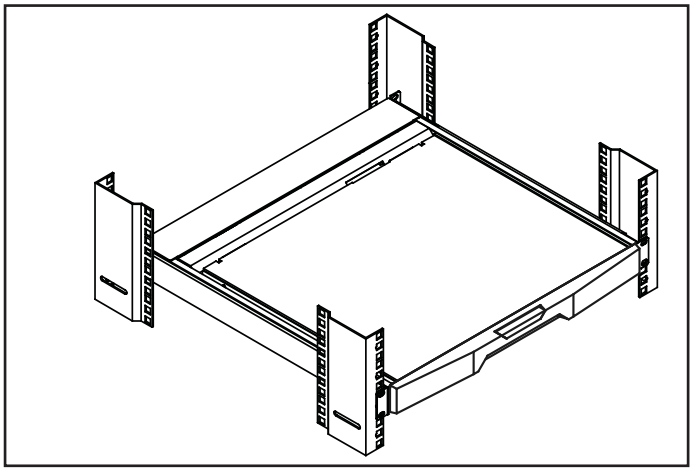
**Step 1**

- Insert the left and right rear mounting brackets into the LCD console drawer.



**Step 2**

- Measure the depth of the front and rear mounting rails.
- Align each rear mounting bracket to a suitable length.



**Step 3**

**Complete the installation**

- Fix the LCD console drawer into the rack.

**M6 screw, cage nut & cup washer x 8 are provided.**

## < 1.3 > Installation - How to Use the Dual Slides

■ Press the handle button and gently slide out the drawer.

■ Flip up the LCD to a suitable angle.

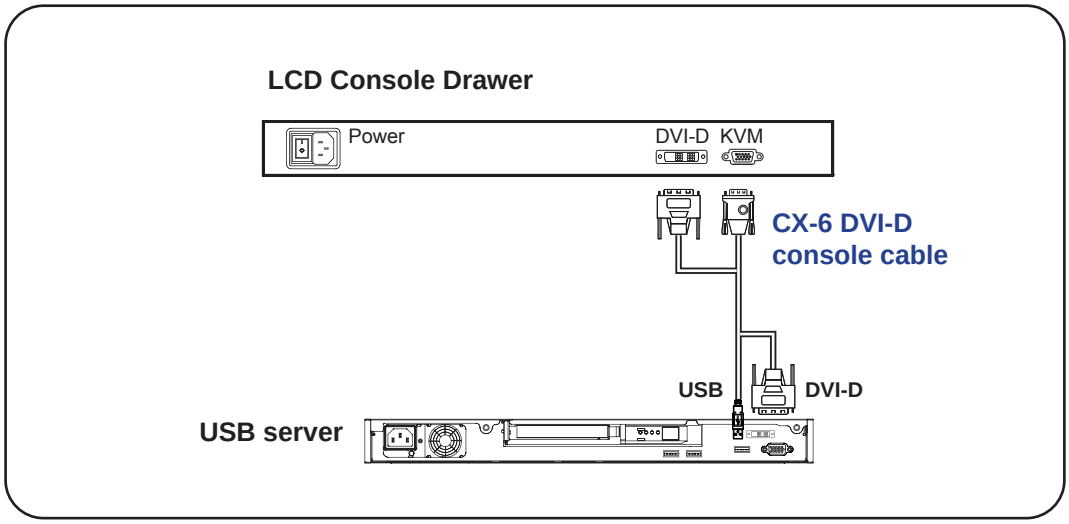
■ Operate the LCD console drawer.

■ Flip down the front panel.

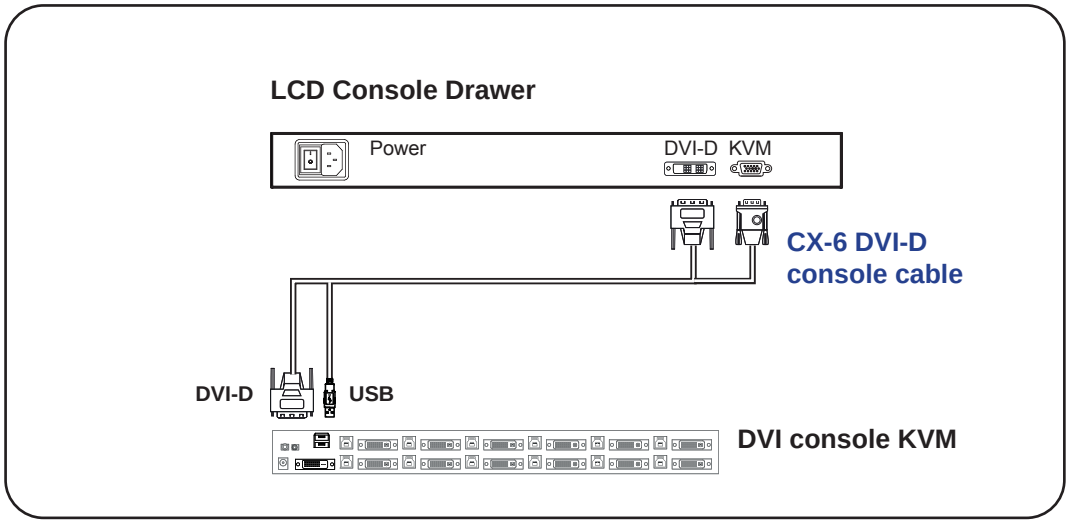
■ Press the handle button and gently push back the drawer into the rack.

■ Return the LCD console drawer to park position.

## < 1.4 > Connection to USB Server via CX-6 cable

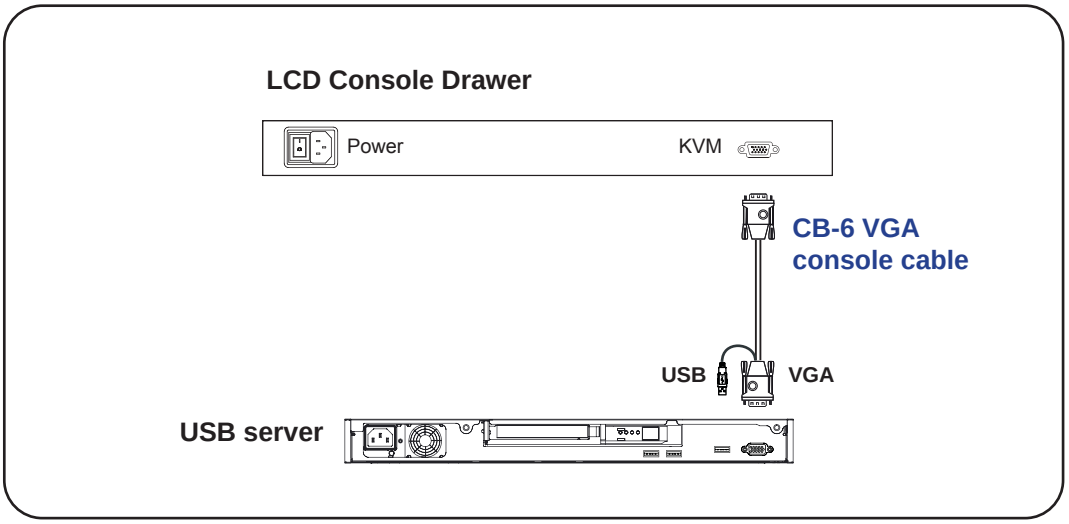



## < 1.4 > Connection to external KVM via CX-6 cable

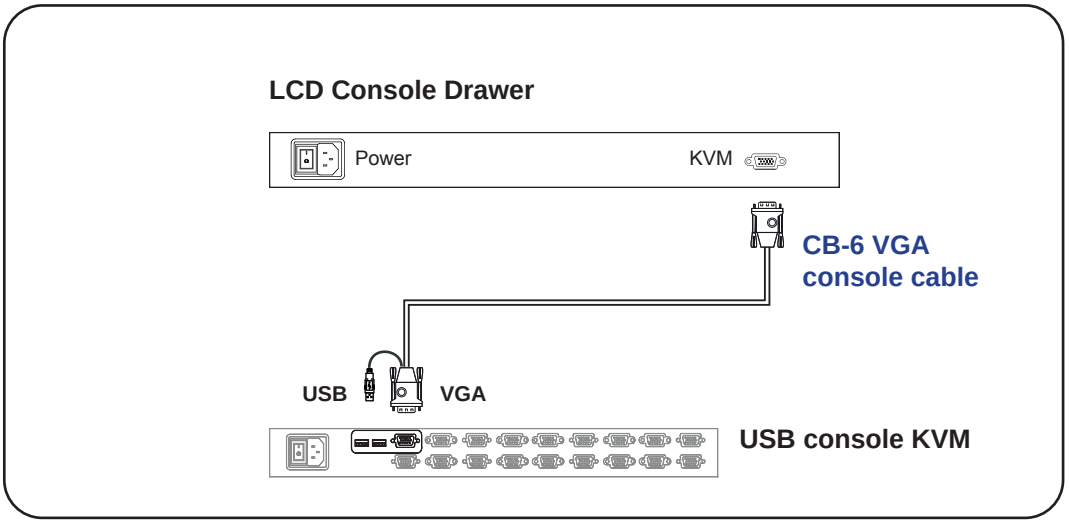



**Caution :** The LCD console drawer is hot-pluggable, but components of connected devices, such as the servers and KVM switch, may not be hot-pluggable. Plugging and unplugging cables while servers and KVM are powered on may cause irreversible damage to the servers, KVM and LCD console drawer. Before attempting to connect anything to the LCD console drawer, we suggest turning off the power to all devices. Apply power to connected devices again only after the LCD console drawer is receiving power. The company is not responsible for damage caused in this way.

## < 1.4 > Connection to USB Server via CB-6 cable




## < 1.4 > Connection to external KVM via CB-6 cable

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## < Part 2 >

## < 2.1 > Product Specifications

| | | |
|---|---|---|
| **LCD Panel** | Panel Size ( diagonal ) | 17.3-inch Widescreen TFT color LCD |
| | Display pixel ( dots x lines ) | 1920 x 1080 |
| | Brightness ( typ. ) | 400 |
| | Contrast Ratio ( typ. ) | 600:1 |
| | Color | 16.7 M, 8-bit |
| | Viewing Angle ( L/R/U/D ) | 80/80/60/80 |
| | Response Time ( ms ) | 40 |
| | Dot pitch ( mm ) | 0.1989 |
| | Display Area ( mm ) | 381.888H x 214.812V |
| | Surface treatment | Anti-glare, Hard-coating |
| | Surface hardness | 3H |
| | Backlight Type | LED |
| | MTBF ( hrs ) | 50,000 |

| | | | |
|---|---|---|---|
| **Video Connectivity** | Digital | HDMI | HDMI 1.1, CEA-861-D |
| | | DVI | DVI-D, TMDS single link |
| | Analog | VGA | Analog 0.7Vp-p |
| | | Composite ( BNC ) | NTSC & PAL |
| | | S-Video ( 4-pin ) | NTSC & PAL |
| | Plug & Play | DVI / VGA | VESA EDID structure 1.3 |
| | Synchronization | VGA | Separate, Composite & SOG |

| | | | |
|---|---|---|---|
| **Audio Connectivity** | Audio Input | Connector | 3.5mm stereo jack |
| | | Impedance / Power level | 30kΩ / 750mV |
| | Audio Output | Connector | 3.5mm stereo jack |
| | | Resistance / Power level | 30kΩ / 2.8V |
| | Speaker | Dual Stereo Speaker | 2W x 2 |

*When the audio output is connected, speaker output is OFF

| | | | |
|---|---|---|---|
| **Power** | Power Supply | Range | Auto-sensing 100 to 240VAC, 50 / 60Hz |
| | Power Consumption | Screen display ON | 34W or less |
| | | Power saving mode | 4W or less |
| | | Power button OFF | 1W or less |

| | | |
|---|---|---|
| **Regulatory** | Safety | FCC & CE certified |
| | Environmental | RoHS2 & REACH compliant |

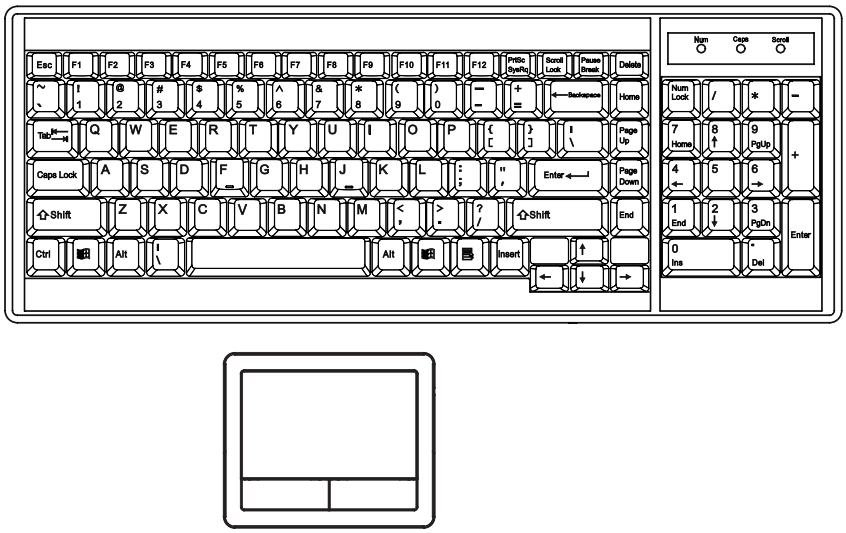
| | | | |
|---|---|---|---|
| **Environmental Conditions** | Operating | Temperature | 0 to 55°C degree |
| | | Humidity | 20~90%, non-condensing |
| | Storage | Temperature | -5 to 60°C degree |
| | | Humidity | 5~90%, non-condensing |
| | | Shock | 10G acceleration (11ms duration) |
| | | Vibration | 5~500Hz 1G RMS random |

| | | |
|---|---|---|
| **Physical Specification** | Product ( W x D x H ) | 441.6 x 650 x 44 mm<br>17.4 x 25.6 x 1.73 inch |
| | Packing ( W x D x H ) | 595 x 860 x 140 mm<br>23.4 x 33.9 x 5.5 inch |
| | Net Weight | 11.9 kgs / 26.2 lbs |
| | Gross Weight | 17.9 kgs / 39.4 lbs |

| | | | |
|---|---|---|---|
| **Applicable Format** | DVI-D / VGA Input | PC Signal | 1920 x 1080 x 60Hz |
| | | | 1360 x 768 x 60Hz |
| | | | 1280 x 1024 x 60 / 75Hz |
| | | | 1280 x 960 x 60Hz |
| | | | 1280 x 768 x 60 / 75Hz |
| | | | 1152 x 864 x 75Hz |
| | | | 1024 x 768 x 60 / 70 / 75Hz |
| | | | 848 x 480 x 60Hz |
| | | | 800 x 600 x 60 / 72 / 75Hz |
| | | | 720 x 400 x 70Hz |
| | | | 640 x 480 x 60 / 72 / 75Hz |
| | | | 640 x 400 x 70Hz |
| | | | 640 x 350 x 70Hz |

# < 2.2 > Keyboard / Mouse Specifications

Ge G keyboard integrated with touchpad

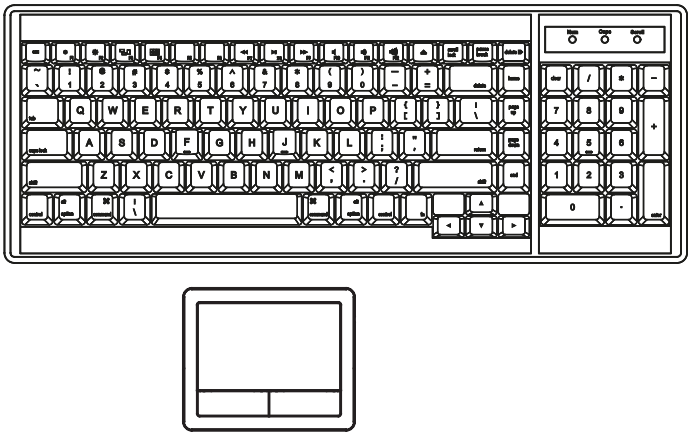


| | |
|---|---|
| **Key force** | 55 ± 5g |
| **Travelling distance** | 3 ± 0.3mm |
| **Switch life** | > 10 million life cycle time |
| **Software support** | MS Windows 7 / 2008 / 2003 / 2000 / XP / ME / 98 / DOC<br>Linux / Mac |

## Supporting layouts

| | | | | | |
|---|---|---|---|---|---|
| **America** | United States | | | | |
| **EMEA** | United Kingdom | Germany | France | Spain | Norway |
| | Italy | Russia | Switzerland | Netherlands | Portugal |
| **Asia** | China | Japan | Korea | Arabia | Turkey |

Me MAC keyboard integrated with touchpad



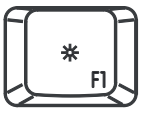
## Supporting layouts

**America**

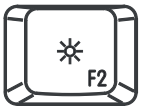
United States

## How to Use "MAC" Keyboard

### Keyboard Features



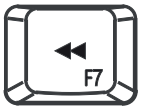
**F1**
Decrease display brightness



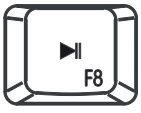
**F2**
Increase display brightness

**F3**
Mission control
* Only works with OS X Lion default Keyboard Shortcuts.

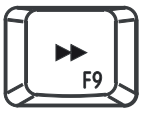
**F4**
Dashboard



**F7**
Rewind



**F8**
Play / Pause



**F9**
Fast-forward

**F10**
Mute sound

**F11**
Decrease volume

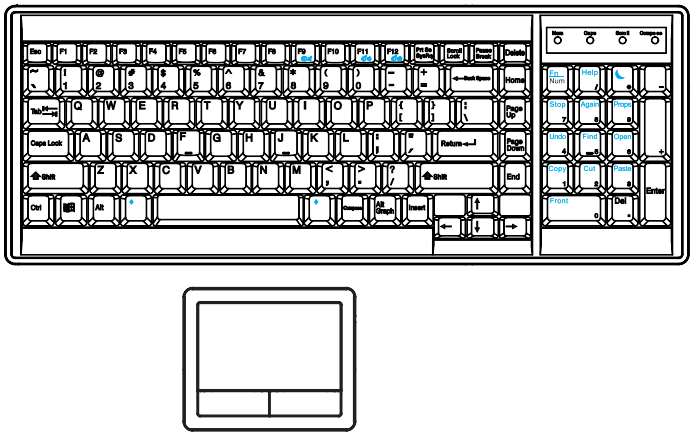
**F12**
Increase volume

**Eject disc**

**Command**

# < 2.2 > SUN Keyboard / Mouse Options

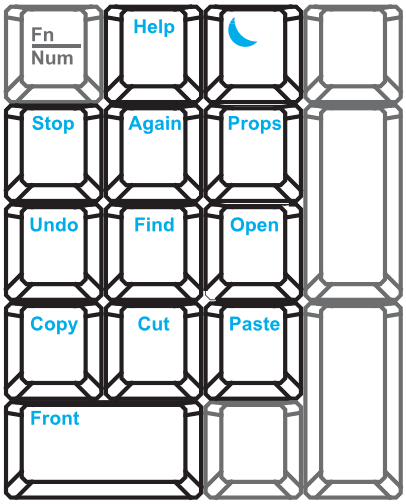
**Se** S keyboard integrated with touchpad



## S keyboard integrated with touchpad / trackball

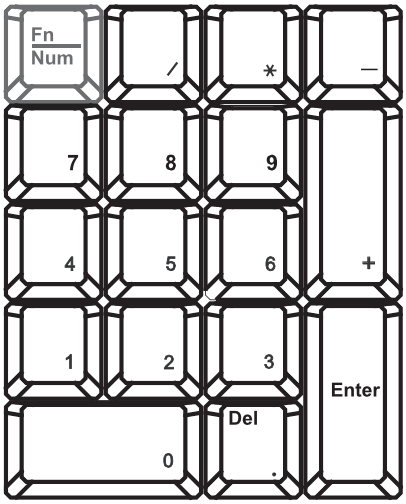
- Incorporates SUN keys, including Stop, Cut, Paste, Compose, Copy and Help
- 104 key notepad keyboard with full numerical pad and SUN function
- USB interface
- US layout only

## How to Use "S" Keyboard




**Num LED in Off mode**

Key pad behaves as a SUN Solar system administration command mode

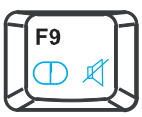



**Num LED in Green mode**

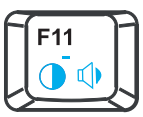
Key pad behaves as a normal key pad mode

### Audio / Display Keys

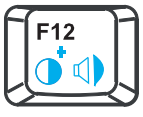
*** Please ask your supplier for full details**




**F9**
Audio : Mute
Display : Degauss



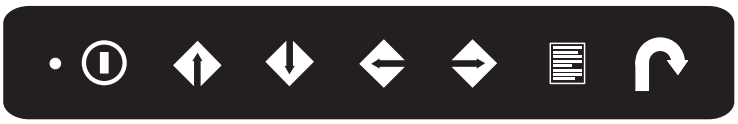

**F11**
Audio : Decrease volume
Display : Decrease contrast



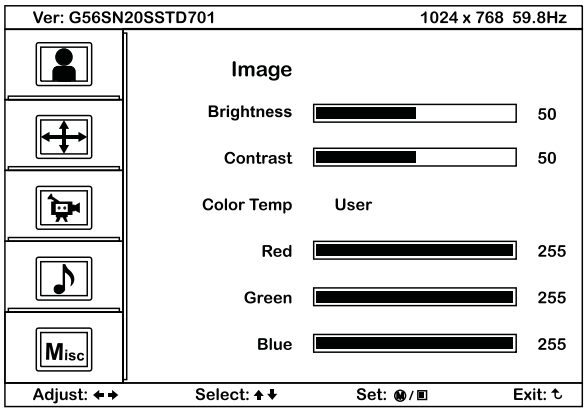

**F12**
Audio : Increase volume
Display : Increase contrast

# < 2.3 > On-screen Display Operation ( OSD )

- Power light
- Green = On
- Orange = Power saving



| Membrane Switch | Function |
|---|---|
| | Power on / off LCD |
| | Display the OSD menu |
| | Scrolls through menu options and adjusts the displayed control<br>(To auto adjustment by pressing the button for 5 seconds) |
| | Exit the OSD screen<br>Toggle analog, digital & video connection (DVI-D and video options only) |




## OSD Configuration Page

**Image:**
for the brightness, contrast, color temp, red, green, and blue

**Geometry:**
for the auto adjust, H position, V position, phase and clock

**Video:**
for the colour, tint, sharpness, noise reduction, DCDi and TV Setup

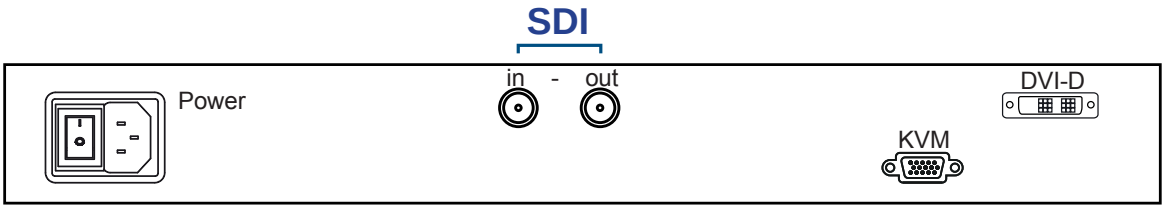
**Audio:**
for volume, bass, treble, balance, AVL and mute

**Misc:**
for the language, OSD position, graphic mode, ratio, reset and timer

# < Part 3 >
## < 3.1 > Options : 3G / HD / SD-SDI input

Austin Hughes' SDI input is an ideal solution for the broadcast-grade video and high resolution CCTV market.

Designed for use with CyberView Full HD 1080p and ultra high resolution 1920 x 1200 LCD displays, Austin Hughes provides a SDI input module without using additional space or power and it comes standard with a 2-year warranty.




| | | |
|---|---|---|
| **INPUT** | 3G-SDI IN | BNC x 1 / 0.8Vp-p ( 75 ohm ) |
| | 3G-SDI OUT | BNC x 1 / Active through, equalized & relocked |

| | | |
|---|---|---|
| **Standard Compliance** | Video | SMPTE 425M / 274M / 296M / 125M<br>ITU-R BT.656 |
| | Audio | SMPTE 299M / 272M-C |

| | | | |
|---|---|---|---|
| **Compatible Video Format** | 3G-SDI | 1080p<br>1080p<br>1080i<br>720p | @60 / 50Hz, 4:2:2<br>@30 / 25 / 24Hz, 4:4:4<br>@60 / 50Hz, 4:4:4<br>@60 / 50Hz, 4:4:4 |
| | HD-SDI | 1080p<br>1080i<br>720p | @30 / 25 / 24Hz, 4:2:2<br>@60 / 50Hz, 4:2:2<br>@60 / 50Hz, 4:2:2 |
| | SD-SDI | 480i | @60Hz, 4:2:2 |
| | ITU-R BT.656 | 576i | @50Hz, 4:2:2 |

| | | |
|---|---|---|
| **Compatible Audio Format** | 3G-SDI | 48kHz, 16 / 20 / 24 bit, 2 CH, Synchronized Video |
| | HD-SDI | 48kHz, 16 / 20 / 24 bit, 2 CH, Synchronized Video |
| | SD-SDI | 48kHz, 16 / 20 / 24 bit, 2 CH, Synchronized / Asynchronized Video |

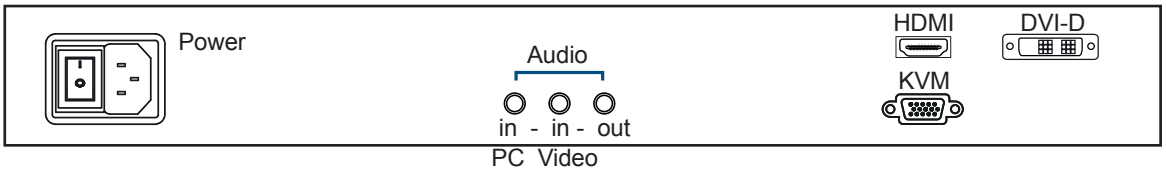
| | | |
|---|---|---|
| **Max. Transmission Distance 75 ohm coaxial cable** | 3G-SDI | 150m at 2.97Gb/s |
| | HD-SDI | 250m at 1.485Gb/s |
| | SD-SDI | 480m at 270Mb/s |

## < 3.2 > Options :

**- HDMI** ( HDMI 1.1, CEA-861-D )

**- Audio** ( Built-in Dual Stereo Speakers, 2W x 2 )
( 3.5mm audio jacks for audio in & out )

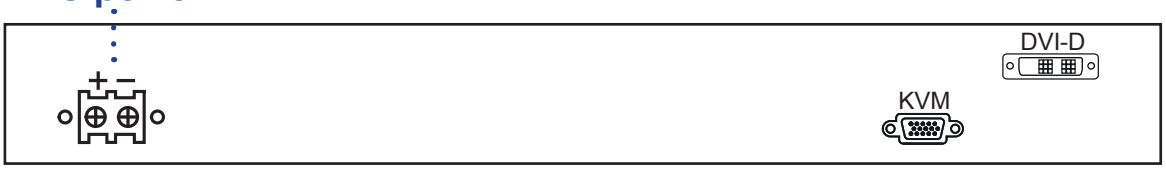
**For dual slide 1U / 2U LCD console drawer, the user can only select one of the above four options.**



## < 3.3 > Options : DC Power

| Model | 12V | 24V | 48V | 110 ~ 125V |
|---|---|---|---|---|
| **Input rating** | | | | |
| Input voltage: | 12-Volt | 24-Volt | 48-Volt | 110-Volt |
| Input range: | 9 ~ 18V | 18 ~ 36V | 36 ~ 75V | 66 ~ 160V |
| Input current | | | | |
| - No load | 50 mA | 50 mA | 50 mA | 40 mA |
| - Full load | 4950 mA | 2450 mA | 1220 mA | 993 mA |
| **Output rating** | | | | |
| Output voltage: | 12-Volt | 12-Volt | 12-Volt | 12-Volt |
| Output current: | 4.16A | 4.16A | 4.16A | 8.4A |
| **Efficiency** | 84% | 85% | 85% | 92% |

### DC power

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**Option excludes 1 x power cord and 1 x AC power adapter**

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